



THE Macdonald Farm Journal

VOLUME 13 No. 2

OCTOBER 1952

F A R M . S C H O O L . H O M E



YESTERDAYS IN AGRICULTURE



FROM MUSCLE POWER TO HYDRAULIC POWER

In lifting drudgery from the backs of those who produce our food, the use of hydraulic lift equipment on the tractor in 1935 marks a mile post in the advance of farm mechanization.

On modern farms hydraulic loaders are finding scores of new uses besides the one shown above. Back-breaking jobs such as fencing and excavating are being shifted to hydraulic power. Hydraulic controls for tractor-mounted and trailing farm implements are making possible finger-tip control of massive assemblies,

thereby conserving human energy, setting new standards of operator safety and comfort, and producing more and better work in a given period of time.

Imperial Oil engineers have watched developments and have studied the requirements of hydraulic systems for hydraulic fluids. Providing special products where needed and perfecting scores of products in common use are ways in which Imperial Oil contributes to an efficient and progressive agricultural industry.



IMPERIAL OIL LIMITED

Farm Division

Design For Living

Webster's dictionary defines the word college as "a building or group of buildings used by a university or one of its schools," and in the literal sense that is indeed what a college is—bricks and mortar. In the true sense, however, it is far more, for within its walls people seek an answer and a design for living.

The main purpose behind any college is, of course, an education. Let's state right here that an education does not comprise the mere cramming of facts and figures in order to attain the standard necessary to be awarded a degree followed perhaps by a better than average job—education means a broadening of the mind, a widening of our horizons; an education develops the ability to think. The routine learning of facts and figures is for children, the widening horizons and broadening concepts which come with the developing mind are man's most important asset.

There have been periods throughout history when education has been of paramount importance. To-day is such a period. Two world wars, a boom, a depression and another armament race have left men both physically and normally exhausted. Like logs upon the river they are moving with the prevailing current.

Ideas are surging across the world capturing men's minds; intolerance and revolution follow in their wake. This is the challenge we face to-day. This is why education is so badly needed, for it leads to understanding and without this understanding of the basic problems we are up against we cannot hope to attain a solution.

Man has reached a critical stage in his development for science has opened the door to a new world. Atomic energy and all the consequences which its further development thrusts upon him cry out for clear thinking and a new approach. Over the last

half century the man of science has advanced at a prodigious rate, while our standards of thought and morality have progressed at the leisurely rate of the horse and buggy.

To prepare man for his new role, therefore, requires a new outlook. No longer can any of us content ourselves with a narrow provincial view of affairs, for seemingly insignificant events on the other side of the world may affect our well-being as decisively as a drought in our own farming area.

All these problems are one in that their solution demands a positive approach, a wide vision and clear thinking. This means that we must seek an answer with minds cleared of old prejudices and too long accepted half-truths. The basic concepts upon which we were brought up may need to be overhauled. The supremacy of race or colour cannot long be tolerated in a world where vast segments of the population are awakening to a new belief in the equality of all men. There is a sense of urgency in the air; we must act now.

We accept so much in our daily lives, our activities are carried on without reflection and it seldom occurs to us to challenge any of the accepted principles—yet it may well be that our survival demands that we begin to question and reflect upon those things which generally pass for the truth. Education properly applied can provide us with the tools to carry on.

The first duty of a college, therefore, is to teach all within its walls to use their capacity for thought upon every subject. Once we have acquired the ability to see things in their right order, to follow on one step at a time, we have the key which will help us solve the problems which surround us as individuals and as nations.

Any article in the *Journal* may be reprinted if the source and the author are credited.

The Macdonald Farm Journal is owned and edited by Macdonald College, and is published in Montreal, P.Q. All correspondence concerning material appearing in the *Journal* should be addressed to: The Editor, Macdonald College, Que.

Chairman of the Board, W. H. Brittain, PhD., Editor, A. B. Walsh, B.Sc. (Agr.), Associate Editor, H. R. C. Avison, M.A., Farm Editor, Colin Muirhead, M.S., Circulation Manager, L. H. Hamilton, M.S., Business Manager, J. H. Holton, B.Com.

For advertising rates and all correspondence concerning the advertising section write to the Advertising Representative, E. Gross, 202 Cote St. Antoine Road, Westmount; telephone GLenview 2815.

Subscription rate \$1.00 for 3 years. Authorized as second class mail, Post Office Department, Ottawa.

Fall Management of Pastures

by L. C. Raymond

A good growth of pasture gives a high protein, low cost diet during the summer months. For this reason every care should be taken to increase yields and protect against winter killing. In this article Prof. Raymond gives some pointers on how to carry through a program of careful pasture management.

MAINTAINING good pastures on the farm represents a year-round endeavour where the pasture needs, the locations and the seasonal and long-time-average weather conditions are all taken into consideration. The year-round objective in any pasture program can be very briefly stated. The plan should provide, as far as possible, relatively short leafy herbage through the whole active grazing period. To reach this objective it is necessary, in the average year, to provide for excess pasture, making arrangements at the same time to harvest and store any excess there may be as winter feed for the stock. Fall management is only a part of this larger scheme.

In approaching the question of fall management it is necessary first of all to know what kind or kinds of pastures are involved and so we had better look at the different types and discuss the management of each. Pastures as commonly employed in eastern Canada fall into six fairly distinctive types. These are natural, long term, pastures in the farm rotation, short-term, aftermath grazing and temporary or special.

Natural Pastures

Natural pastures represent the large acreage of grazing land which is not readily tillable, either due to their stoney condition, poor drainage, the steep topography or their distance from the barns. In the majority of cases these fields have never actually been seeded. Following the removal of the tree growth—many years ago—the grasses and legumes which are suited to those conditions have developed a sward which in many cases has been pastured for a great many years. Unless steps have been taken to prevent it, many of them will have developed brush and tree growth or may be presently populated with poverty grass. Endless examples of such pastures can be seen in most sections which should never have had the tree growth removed, since they are too stoney or ledgy to ever expect them to support a worth while pasture sward.

Only the better ones of these natural pastures warrant much expenditure for improvement. If they possess a reasonably good grass sward and are not liable to undue drying out in the usual summer drought, they may well return a profit for a surface fertilization. If the sward



Here's plenty of low cost feed, but it takes a year round program to keep it growing.

is wholly grass, then a complete fertilizer such as a 2-16-6 or a 2-12-10 would be in order. If the sward has a good admixture of wild white clover then a mineral fertilizer, e.g. 0-16-8 would give most profitable returns. Under most circumstances the rate should not be less than 400 lbs. per acre for any of the mixtures mentioned. Spring applications—particularly of a complete fertilizer—are recommendable. Frequently the treatment is split and a mineral application, e.g. 0-16-8 put on in the fall and the nitrogen applied just as growth starts in the spring. Fertilizer dressings of this sort will give some return in the fall but will be beneficial chiefly in the following spring.

Surface working of natural pastures, combined with fertilization and seeding, has in some instances produced worth while results. In general, however, results from this type of renovation are short-lived and would only be undertaken where the pasture need is great or the opportunity favourable.

Long-Term Pastures

A long-term pasture implies one that has been seeded and calculated to remain productive for the longest possible period. Tillable land is also implied where the seed-bed can be adequately prepared. Despite the mixture seeded, after four or five years the swards of a long term pasture will become strikingly similar to that of a natural pasture. The reason for this is that most sown species will give way to those kinds which develop unsown in a natural pasture. This is one phase of what the botanist calls succession. With adequate fertilization and management this change over can be delayed but not stopped. The fall management of a long-term pasture, therefore, should be practically the same as for a good natural pasture as already discussed.

Pastures in the Farm Rotation

Particularly on flat land areas where the vast propor-

tion of the farm land is tillable, the practice is followed of including the pastures right in the farm rotation. The field to be pastured may be preceded by one, two or even three hay crops and subsequently given over to pasture, usually for only one year, when it is again broken and planted to grain or an intertilled crop.

The value of such pastures as these depends primarily on the fertilization they have received, particularly during the sod phase of the rotation. If they have been repeatedly top-dressed with manure or with commercial fertilizer during the hay years they may still be good pastures. Where a long-lived legume such as alfalfa can be maintained until the pasture year their value for grazing will be of a much higher order. On the other hand if no fertility is applied after the year of intertilled crops, their productiveness will have fallen and their carrying capacity—especially in dry years—will be very low indeed.

Here again a fall treatment will be of comparatively little value for that particular year but a good top-dressing with barnyard manure given the previous fall is one of the best ways to improve such a pasture for the succeeding year. Fertilization with commercial fertilizers up to 400 lbs. per acre of a 2-16-6 in the early spring would also be highly beneficial where the manure is not available.

Short-Term Pastures

The short-term pasture is the most intensive type. It means setting aside a specific area—usually near the barn—which is devoted solely to pasture. The area to be used is divided into three or four permanent sections. These sections are seeded in successive years or as they require reseeded and they are grazed rotationally. Grazing off the nurse crop in the year of seeding is the practice followed. This pasture system enables the use of many very valuable pasture species such as Ladino clover and birds-foot trefoil which cannot be utilized as effectively if the seeding is first harvested as a hay crop. The whole pasture set-up on this scheme will consist of a series of small fields, one of the current year's seeding, one a year old, one two years old and usually one that is three years from seeding.



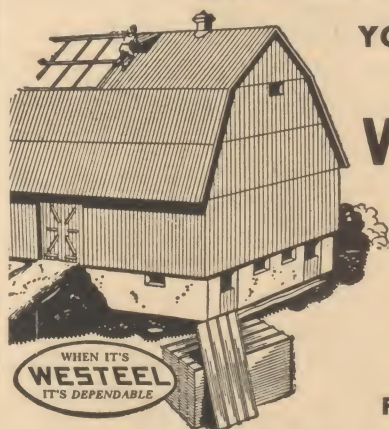
Good grass mixtures provide a thriving pasture.

7AMED FOR WORLD-WIDE SERVICE from branches located in more than 20 countries, the **SUN LIFE ASSURANCE COMPANY OF CANADA** has won universal recognition for the diversity of its comprehensive life insurance and annuity plans. The specific needs of men, women and children under widely differing circumstances are taken care of, and a variety of optional policy privileges offers valuable alternatives to safeguard the interests of the beneficiary.

More than One
and a Half Million
Policies in Force



**SUN LIFE ASSURANCE COMPANY
OF CANADA**



**YOUR BUILDINGS
ARE
VALUABLE!**

**PROTECT
THEM
against
LIGHTNING
FIRE WEATHER**

**with "SECURITY" Barn Roofing
galvanized or aluminum**

Dependable, permanent protection.
Easy to apply. Smart Appearance.
Long term economy.

Send measurements today for free estimate
and folder giving full particulars.

ESTABLISHED 100 YEARS

WESTEEL PRODUCTS LIMITED

4107 RICHELIEU ST. — MONTREAL, P.Q.



Grasses combat erosion and aid in building up the soil.

With such an establishment the aim would be to manage the grazing so as to realize the greatest return from each section. The newer the seeding the greater the care that must be exercised. Particularly it is important to retain the legume or legumes in the mixtures as long as possible. Ordinarily the section which is three years away from seeding should be broken in late midsummer and got ready for reseeding the following spring. Intensity of grazing on the three remaining sections should be in reverse proportion to the age of the stand.

Fertilization is one of the important management factors in handling short-term pastures. Initially the level of fertility should be high but surface dressing of manure or commercial fertilizer should follow at intervals to keep production at a maximum. The use of a light manure dressing on one or more of the sections in the fall of the year has the double effect of fertilizing the stand and at the same time preventing the stock from grazing closely. If the legumes can be retained in the sward commercial fertilizer applied would only be of the mineral type, i.e. an 0-16-8 since all the nitrogen required would be supplied by the legumes themselves.

Aftermath

Throughout the country use is commonly made of the aftermath from hay meadows. If the grazing is not overdone this is a worth while practice. Where red clover is the legume involved it usually is either used for grazing or saved to produce a seed crop or by dividing a field sections can be used for both purposes. With red clover, since it behaves as a biennial, this practice is justifiable since there will be little of it left in the stand the following year in any case. Where alfalfa is the dominant legume much more care is required.

The removal of the first crop for grass silage has done a great deal to improve the quality and quantity of aftermath grazing since the first crop is removed well ahead of the very hot dry weather and recovery is much stronger.

Grazing a newly seeded field after the grain crop is removed is seldom advisable unless the growth is unusually

heavy. In any case the grazing should be light. Rather than going to the expense of fencing off such a field to protect it, the use of a light manure top-dressing, as mentioned previously, to prevent undue grazing can afford the protection required.

Special Fall Pastures

For various reasons fall rye is being increasingly used on our farms. Seeded the middle of August on well prepared land it will afford considerable fall grazing from September 15th onward when many farms are running low on good pasture fodder. Left over the winter, it protects soil effectively against erosion—which is a more important factor than is generally appreciated. Preliminary trials have shown very favourable results from seeding such a rye field with a pasture mixture of grasses and legumes just after the snow has gone and while the frost is still in the ground. Once the land has dried up and the growth started, the rye can be again grazed but the grazing should be light and every opportunity provided for the new seeding to establish.

In this brief discussion emphasis has been laid on the importance of a well-considered pasture plan for any farm. The type or types of pastures developed will depend on the farm itself, the pasture needs, the herd to be grazed and the market for meat or milk as the case may be. That is an individual farm program. Stress should also be laid on keeping up the fertilizer level which not only influences actual production but may go a long way in maintaining legumes in the sward through avoiding winter-killing, and hence the nutritional value of the herbage. Fall management of pastures should have in mind not simply the immediate result but must be one phase only of the overall pasture requirements of the farm.

Careless Poultry Feeding Is Costly

The amount of feed wasted by Canadian poultrymen probably runs into many thousands of dollars annually. It arises no doubt from a lack of appreciation of how rapidly feed wastage builds up until it represents a serious loss in an otherwise efficiently operated industry.

Careless feeding is possibly the greatest cause of feed wastage, and one way to avoid it is to use feed hoppers of proper size and type. Often feed hoppers are used which are too small—particularly for growing stock. In order to avoid frequent feeding there is a tendency to overfill these hoppers, with the result that the birds often "bill out" as much as a quarter to a half of the feed. With feed at five cents a pound this represents a real loss to the producer and in the final analysis to the poultry industry as a whole. If the estimated 70 million domestic fowl on Canadian farms each wastes a quarter-of-a-pound of feed in its lifetime, the feed loss would run to 8,750 tons. At today's cost of feed this is a considerable overall loss to the industry.

Clipping Keeps Milk Clean

Big Aid in Control of Sediment in Milk Sold

It's easier to command higher prices for clean milk from cows that are clipped.

Sediment is one of the main causes for milk being rejected at the plant. Keeping cows clean is one way to cut down on sediment and this can be done in part by clipping.

Three main areas on the cow are responsible for much of the sediment in milk, especially where cows are milked by hand. These areas include the thighs, udder and belly. The tail is another potential dirt threat.

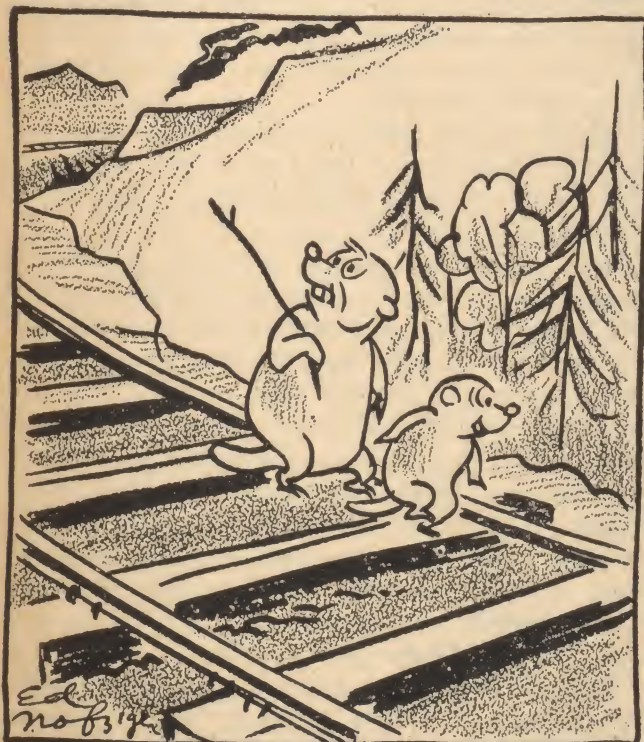
Clip the tailhead and tail down to the switch. Then clip the switch so it will clear the ground by 4 inches. Clip the udder thoroughly from the front to the rear attachment.

Next move to the belly and hocks, clipping clean these parts as well as the area behind a line drawn from the milk well over the thurl to the base of the tailhead which has been previously clipped.

A clipped cow doesn't guarantee clean milk, but it does make the job of producing clean milk a lot easier. It's still a good idea to brush cows before each milking to remove all loose dirt. And it also takes clean utensils and good straining to produce a clean product.

"JOE BEAVER"

By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"Of course trains still run on wood—3,000 cross ties go into a mile of track."

Try Cooking Corn This Way

Here's something new in corn-cooking recipes. Husk the corn, and brush each cob with melted butter; sprinkle liberally with salt and pepper to taste, and a little paprika for eye appeal. Then wrap each ear in Aluminum Household Foil and place on the rack in a 400° pre-heated oven. About thirty minutes of unattended baking will bring the corn to its tender best.

Seasoning the cold corn allows the flavour of the butter and condiments to soak right into every succulent kernel on each cob. And the rich flavour is sealed in—there are no pans to wash—no oven to clean. And you serve the corn wrapped in the cooking foil so that each ear is hot and buttery for "seconds", maybe "thirds."



STOP HIM
and
HIS KIND

with ALROL ALUMINUM Protects Fruit Trees!

Guard fruit trees and berry bushes against mice and other field rodents. USE ALROL ALUMINUM INSULATION.

As these pests are allergic to aluminum, trees and bushes can be well protected with a wrapping of ALROL ALUMINUM INSULATION around the base and trunk. It's low in cost—easy to apply.

See your local building supply and lumber dealer or mail coupon for samples and full particulars.

ALU-FT ALUMINUM ROLLING MILLS LIMITED M.J.
1405 PEEL ST. • MONTREAL, QUE.

NAME _____

ADDRESS _____

CITY _____ PROV. _____

The importance of safe drinking water is often overlooked by people in rural areas, at summer resorts and on outings. The fact that a stream looks sparkling clear does not mean that it is fit to drink. The bacteria in the water may cause serious illness. All waters taken direct from their natural sources should be filtered or boiled before being used for human consumption.

TREES! WATER! PEOPLE!

by J. Davidson



Poor farm practices lead to loss of valuable soil.

FRED CAMPBELL is much like many other 'retired' farmers. His wife swears he works harder now than when he farmed on his own. Fred liked to be 'on call' in the neighbourhood. Being a warm, friendly, talkative person he likes to get out among his friends. But people that know him are seeing a different Fred these days. For Fred is sparked by what he saw early in June in that field Jim Moore was ploughing. Wherever he goes Fred Campbell now talks trees and water to every person he meets. He speaks with a compelling authority and enthusiasm for his favourite subject.

It hasn't always been like this. Fred, like a lot of us, has been told for years how the properly managed woodlot pays off with better crops and an assured water supply on the farm. But until he saw Jim Moore turning up mud in mid-June he had always figured the District Foresters exaggerated a bit. The field he saw Jim working, he remembered, was 'near blow' light sandy soil. Every season (wet or dry) this field was as dry as a bone by the end of May. The pasture spring was always a mere trickle by June.

Fred Campbell lives in Hope Township north of Port Hope in Ontario. The soil is light, the whole area is cut up by high steep hills. The valleys are usually narrow and winding. Some are wide depressions surrounded by ridges. Very little of this country could be classified as Grade A farm land. Hope and three other townships form the boundaries of Ontario's first Watershed Development. For this area is the Ganaraska Watershed where the Ontario Government inaugurated Canada's first attempt at establishing a River Valley Authority.

The town of Port Hope, at the mouth of the Ganaraska, was sick and tired of being flooded out nearly every spring—something had to be done. The Authority was set up to work with local municipalities. The purpose was not to build dams but to keep the water in the

Fred Campbell was only interested in buying pigs when he called on Jim Moore. But by the time he left again he had new vision. The reforestation projects in Ontario's Ganaraska Watershed Development Authority had taken on a different meaning.

watershed. The Ganaraska River would be fed by springs and year around creeks, rather than a rush of spring run-off and silt. To do this the Authority would purchase sub-marginal land from tax-delinquent owners. Through its Foresters and key people in a voluntary Watershed Development Association, a broad program of reforestation and conservation education would be carried out.

So you see that Fred has heard plenty about trees and reforestation. He belongs to the Ganaraska Watershed Development Association. He has planted his share of trees in the Durham County Forest in neighbouring Caven Township. "Well! Caven Township," Fred figured, "has always had more than its fair share of blowsand. It is better to plant the abandoned farms to trees than grow nothing." Fred is the first to admit it has. But to him trees were nothing more or less than a crop for poor soil and steep slopes.

This summer was an extremely dry one in Ontario. In the sandy hill country of Hope Township pastures were burned brown. As usual most farmers found it necessary to drive cattle for water. Many hours a day were wasted in this chore.

Fred Campbell's friend Jim Moore had such a 'dry farm'. It lies in a short broad valley with steep ridges to east and west. For years Jim Moore had never had an adequate water supply.

Fred knows this farm—as he knows most in this county. As he drove his truck along to Jim's place to pick up the pigs he had bought, he had no thoughts for reforestation. But as he turned in Moore's gate a great path of green on the east ridge caught his eye. He remarked to himself with a grin, "That sure is a nice thick stand of pine up there." He remembered, smilingly the time the District Forester had persuading Charlie Challice that trees were a better bet on that ridge. Charlie he knew was proud of those pines he planted out twelve years ago. This pine ridge formed the east side of Jim Moore's shallow valley farm.

Water on a Dry Farm

When he pulled up at the house, Mrs. Moore directed Fred to the field north of the house. Jim was ploughing for buck-wheat. Fred climbed out of his truck and struck off for the field where he could see Jim at work with a two-horse team.



A balanced agricultural region contains a variety of trees or shrubs all keeping the soil in place.

From the distance Jim hailed Fred, "Come on over here, I've got something to show you. You're going to find it pretty hard to believe." As Fred started out he noticed there was something different about the ploughland.

"Holy Cow," he shouted to Jim, "This field is real damp, and in a June like this one! I've never seen anything but 'near blow' turned up in this field."

"You still haven't seen anything," Jim retorted with a grin. "Wait until you get over here."

By this time Fred was feeling really excited. His footsteps quickened. He hurried down to where Jim was turning up dark, damp soil with a two-bottom gang.

"See that," Jim stated pointing to his foot, "Bet you never saw that before."

Fred looked, goggled, then spat out his words excitedly, "Well, I'll be darned! Who'd have believed it could happen in this field—water in the furrows in a dry June."

No, Fred had never seen water like this on the Moore place before. Why it was only a very few years back that he remembered Jim Moore complaining. Jim had only enough water from the spring to water once a day. Sure! Ever since he could remember the old Moore place had been a 'dry farm'. Summer was always a water problem. He had once helped scoop out the mud hole near the spring after the cattle trampled it in. If you were lucky, the trickle filled up enough after nursing all day to supply one watering for the cattle. Yes sir! water was always a problem on the Moore place.

Fred was snapped to attention by Jim Moore's waving hand and booming voice. Fred looked up. Jim was pointing back along the over-flow channel from the spring.

"Now Fred", he was saying, "You won't believe this but that swale there always has water in the bottom. The horses sink to their knees in mud. Get a gander at the brush and willows and stuff growing up in it. You know, pretty soon I won't be able to cross it with machinery."

Jim's arm swung around again. He was pointing to the east ridge and the Challice woodlot. "That's where she comes from Fred", he enthused, "without Charlie's



An unprotected soil is easily washed away by even the lightest shower.

pine up there on the ridge, I'd be fresh out of water, as usual".

"Why", Jim went on. "I went up there the end of May. You know it was as cool and damp as could be, there was even spots where snow was still piled up. That four acres of pine up there is worth plenty to me".

Jim and Fred turned and went back up alongside the swale to the spring box. This was no ordinary mere trickle as Fred remembered it, it was a really good spring.

"That spring", smiled Jim contentedly, "keeps us and the cattle in water now with plenty to spare. Look at her run, and this is the driest summer in years."

The two men glanced back to the field where the team stood patiently. Jim turned to Fred, "You know, those horses used to skim a two-furrow gang through that field like nothing, but now I have to give them breathers. It's pretty hard work with all that moisture in the ground."

Later, as Fred drove towards home with Moore's pigs in his truck, he got to thinking:

"So this is what all this business of tree planting really means. It's a lot more than just trees for their own sake. Why it's trees for the sake of making the springs run again. It's trees on the hills that puts water in the ground for the crops in the valleys. This Ganaraska Valley Authority isn't just to keep Port Hope's feet dry in the spring. No sir! this whole scheme is more than that all right. It means water in the springs and in the creeks all year around. It means that Jim Moore, and the rest of us farmers around here can be a lot surer of a crop. We can be sure of lots of water for our stock. Why, it means this whole area can be green again and prosper."

And Fred Campbell is no man to keep his light hidden under a bushel. See Fred at the Community Livestock Exchange. He tells us his story of trees and water and its effect on all of us. Hear Fred when he hires out for the day. You won't leave without hearing about his visit with Jim Moore. You too will look at trees with a new appreciation. For you will learn what trees really mean—water and a better way of life.

Breaking The Bottleneck In Forage Seed Production

by C. S. Garrison*

The newly set up Canadian Forage Seed Project was described briefly in the May issue of the Journal. Its operation will follow in part along the lines of the United States scheme which has been operating for some years. The scheme and the problems encountered are described here by one of the top men in the United States Department of Agriculture.

GRASSLANDS, like any other crop, will benefit from the use of seed of the best adapted varieties. Farmers are obtaining bigger and better yields of cereal, fiber, and vegetable crops because they are planting seed of superior varieties. The part good seed can play in increasing crop yields is well illustrated by the planting of corn hybrids. The United States is now producing over three-quarters of a billion bushels more corn on 18 million fewer acres than before corn hybrids were generally available. The use of seed of improved forage crop varieties can contribute just as much or even more in the way of increased production from grasslands as corn hybrids did to increase corn production.

In the past farmers have not been able to realize the advantages from the improved forage crop varieties. They have not yet shifted from the "old" common strains to new varieties which have been developed by research. The primary bottleneck preventing this shift has been lack of seed. Until seed of the new varieties is available to all farmers who should use them, the potential for increased forage production and soil improvement will not be realized.

One of the major factors limiting the production of certified seed of improved forage crop varieties has been the failure to produce the required stock seed. In the United States we build this up in 3 steps: (1) breeder, (2) foundation, and (3) registered seed. From this comes the certified seed, used for forage and soil improvement plantings. Also much of the grass and legume seed has been grown far from its area of use. In the past seed producers have not always been informed as to the needs in the consuming area and they just grew "seed."

Attempts to produce seed of several forage crops in the Eastern half of the country proved unsuccessful. Unfavorable climate resulted in poor yields. Seed production was not profitable. Hay and pasture harvests

*Principal Agriculturist, Division of Forage Crops and Diseases, Bureau of Plant Industry, Soils, and Agricultural Engineering, United States Department of Agriculture, Beltsville, Maryland.



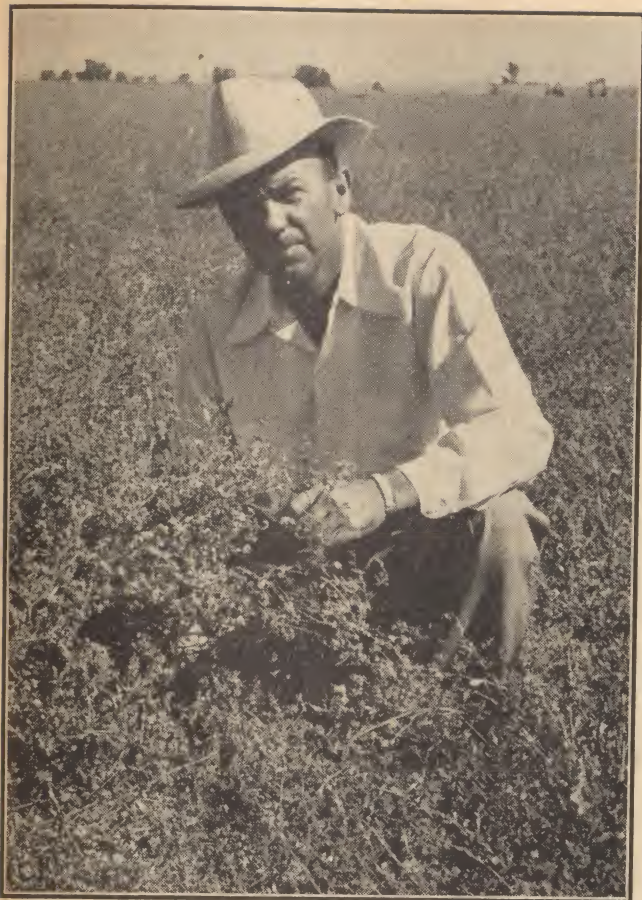
This is a 160 acre field of Ranger alfalfa being grown for certification in California. In 1949 this field produced certified seed with 100 per cent purity and 96-98 per cent germination.

were given first consideration. Even when breeders in the U.S. Department of Agriculture and State experiment stations produced superior strains there was no coordinated plan to locate the best areas for increasing seed. The initial releases of breeder seed were often lost. This was discouraging both to plant breeders and experiment stations.

Before 1945, seed of superior forage crop varieties was practically non-existent though some varieties had been released. For example, Tift sudangrass is a superior variety adapted to the Southeastern States. It is resistant to a number of leaf diseases which are very destructive to sudangrass during the summer and early fall when forage for grazing is at a premium. Tift was released in 1942. Cross-pollination with common sudangrass and mechanical mixtures resulted in the loss of this variety within four years after it was released. It was necessary for the breeder to reestablish the strain. When only a small amount of seed was available at the end of the fourth year, the seed shortage caused farmers to lose interest in the variety. Now for the second time a certified seed supply is being built up under the new plan to maintain an adequate supply of breeder, foundation, and registered seed.

Cumberland red clover, resistant to southern anthracnose and adapted to all or parts of 12 states, was introduced in 1938. But it never was available in large enough quantities to supply the demand. In 1948, ten years after the variety was released, only 842,000 pounds of the seed were produced. At least 20 million pounds were needed annually.

Atlantic alfalfa, a superior strain developed in New Jersey, was released in 1940 yet 11 years later there were only 6,000 pounds of certified seed available. Here



This is an 80 acre field also in California. It is growing certified Atlantic alfalfa. Stock seed of this variety is being increased under the project.

again the demand for certified seed of this variety was in the neighborhood of 5 million pounds. Similar stories could be told about the slow increase of Ranger and Buffalo alfalfa in the years immediately following their release.

For several years research, extension and certification workers and seedsmen had recognized the problems involved in maintaining adequate stock seed of the improved strains, locating the best producing areas, and coordinating the needs of the consuming area with production. In 1946 they took the first step to eliminate these problems. The result was organization of the *National Foundation Seed Project*, in many ways similar in objectives and operations to the recently organized *Canadian Forage Seeds Project*.

The Project Has Succeeded

The results to date from the Foundation Seed Project can best be measured in terms of pounds of certified seed available for farm use. In 1952 U.S. farmers will be able to buy nearly 15 million pounds of certified Ranger alfalfa, one-half million pounds of certified Atlantic alfalfa, 3.7 million pounds of certified Buffalo alfalfa, and 2.5 million pounds of certified Kenland red clover seed. In addition enough stock seed is available to supply the future needs of each of these varieties. Stock seeds of Tift sudangrass have already been built up to a point

where they exceed actual annual demand. Reserves can now be maintained.

Kenland red clover illustrates the striking success of the project. Work has been underway with this variety for only 3 years. Already it appears that 30 times as much seed can be produced in half the time required to increase similar red clover varieties prior to the initiation of the project. Figure I shows a comparison between the seed production records for Cumberland and Kenland red clover. The most seed available in any one year for Cumberland was less than one million pounds.

The story for Kenland is quite different. Through cooperative efforts, with the Foundation Seed Project providing the liaison between all interested groups, the foundation, registered, and certified seed have been multiplied from a few pounds in 1947 to 3.7 million pounds in 1951. During the past three years a limited supply of breeder seed has been multiplied to 250,000 pounds of foundation seed. When increased through the registered and certified seed generations, this will provide at least 25 million pounds of certified seed.

Success in building the seed supplies of this variety was due to the selection of good growers in areas where seed production was a "sure bet." In 1951, 97.5 percent of all the Kenland seed was grown in the Western states although the variety is best adapted for forage in the Eastern and Southern states.

A good example of the rapid build up is the achievement of Bernell Harlan and Theo Dumars of Woodland, California. They planted 22 pounds of breeder Kenland on 27 acres on March 6, 1950. The following September they harvested 16,600 pounds of cleaned foundation seed. In 1951 another crop of 18,255 pounds was harvested from the same field. Other growers in California and Washington have been almost as successful. Seedling year harvests on a large scale make it possible to multiply a handful of breeder seed to millions of pounds of certified seed in a few years—a much shorter time than was ever possible without the full cooperation of all interested groups.

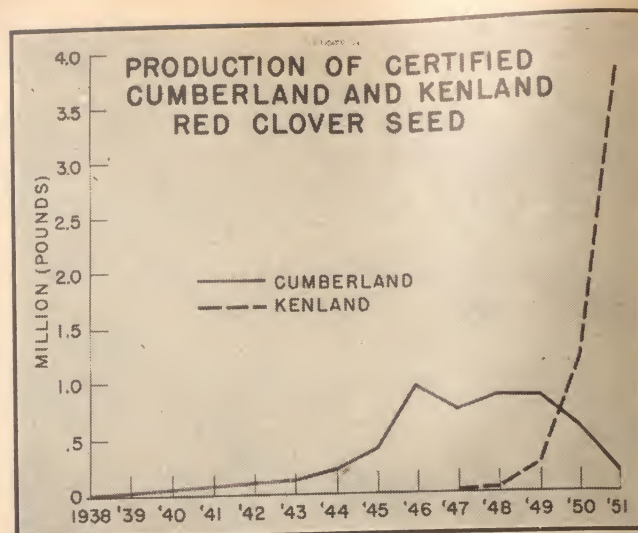
As a result of experience followed by some additional cooperative planning we're going to be able to build up the certified seed supply of certain of the alfalfas in a much shorter time than we originally anticipated. We produce the foundation seed in the variety's region of adaptation and then send it directly to California, Arizona, and New Mexico for the production of certified seed. Southwestern growers must limit stands of alfalfa to not more than 6 years for production of certified seed of northern and central varieties. Growers in this area plant 1 pound or less of stock seed per acre and harvest up to 800 pounds the seedling year. This is above average, of course, but does indicate the potential. On more than 27,000 acres of certified Ranger, Buffalo and Atlantic alfalfa in California in 1951, the average seed yield was over 500 pounds per acre.



These two men are ranching partners who are producing Kenland red clover seed under the Foundation Seed Project. Kenland is a superior variety for the southern red clover belt because of its resistance to southern anthrac-nosis.

The number of generations of seed increase permitted outside a variety's designated region of adaptation varies for different crops. In the case of alfalfa only the certified class of seed can be produced. With the present red clover varieties one generation each of foundation, registered, and certified seed is permitted. These limitations, on the number of generations, are necessary to protect the superior genetic qualities of each strain yet it is possible to build up certified seed supplies very rapidly.

Large quantities of seed of improved forage crop varieties can be produced in a number of new areas



in Western United States. Each of these areas will be planted to the crop best suited to the particular location. An effort is being made to limit the number of varieties of any one species in a particular area. This is usually done through voluntary grower action. The Jefferson County Area in Central Oregon is an example of such action on the part of the growers where they have decided that the only red clover to be grown in the area would be Kenland. Near Pasco, Washington, in the Columbia Basin Project, the growers have decided to increase only Kenland and to limit the alfalfa varieties to Buffalo and Ranger for the present. This cooperative planning has eliminated some of the isolation and land requirement problems which were ever present in the past, and has facilitated the rapid increase of the varieties.

Information Please!

This section should make interesting reading, for it is given over to the problems of our readers. Problems sent in by Farm Forum and other groups will be dealt with here.

Rodents and insects are two enemies of agriculture which farmers find most difficult to combat. They cause losses which run into millions of dollars annually.

Insects may be the more dangerous of the two; not only are they smaller and more prolific, which increases the difficulty of wiping them out, but they often weaken large structures by boring within so that on the surface these structures look perfectly sound but in reality are honey combed with passageways and weakened often to the point of falling and causing additional damage even, perhaps, loss of life.

Such an enemy is the carpenter ant. While this insect may not be responsible for causing such havoc as suggested above, its presence, unless measures are taken to curb it, may well cause the weakening of steps and supports which may well endanger human life.

In answer to many requests it has been thought advisable to give this month's section over to a discussion of the black carpenter ant, the damage they do and what measures are effective in controlling them.

Black Carpenter Ants

Infestations of large, black carpenter ants are comparatively common in dwellings and other buildings during the summer season and their activities may persist in heated buildings throughout the winter months as well. While they can damage the woodwork indoors, it is particularly the steps, floorboards and supports of verandahs which suffer most frequently—often so severely that replacements must be made. Black carpenter ants have been very plentiful this year.

Two species occur in temperate areas of Canada, one of them being present as far north as Alaska. The workers measure from $\frac{1}{4}$ to $\frac{1}{2}$ inch in length and are dark brown to black in colour. They make their nests in wood, hollowing out tunnel-like cavities with their mouth parts. The small particles of wood, looking not unlike sawdust, are pushed out of the nest and usually accumulate on

the floor or elsewhere in small heaps. Such evidence assists in the location of a nest.

Carpenter ant nests may occur outdoors in such locations as logs, old trees, tree stumps, telephone and hydro poles. Indoors they favour wood that has become unsound as a result of dampness, in basements, around leaky roofs and plumbing fixtures. Wood in verandahs, verandah supports, and outdoor steps also provides suitable nesting sites. They frequently become a nuisance in buildings by crawling about in search of food and drink. They are fond of sweets and during the winter when the atmosphere in dwellings is dry they may be found in bathrooms and about sinks seeking water. Ants swarm during the summer months and when this occurs in an indoor nest, the young, bearing wings, appear in large numbers. They frequently accumulate in the vicinity of windows, seeking an exit.

Where possible, it is advisable to replace severely damaged wood with new material. Nests either indoors

or outdoors should be thoroughly treated with an insecticide dust containing either 5 per cent chlordane or 10 per cent DDT. The dust should be blown into infested wood and into any cracks or crevices in the vicinity of the nest. Chlordane wettable powder may be applied in the same manner. Indoor areas frequented by wandering ants should be dusted lightly or treated with a liquid insecticide containing 2 per cent chlordane. The latter may be applied as a coarse, droplet spray or it may be spread on with a paint brush. In any case, the surfaces should be wet to the point of run-off. Chlordane in liquid form should be applied only to local areas of infestation. Over-all applications are not recommended because of its toxicity.

Care should be taken to avoid contamination of food, inhalation, and skin contact. If chlordane gets on the skin, wash with soap and water. Chlordane may be purchased under a variety of trade names.

For The Ladies

Here is a section devoted to the interests of the feminine half of agriculture. Recipes, helpful hints for housework and the latest in fashions will be presented as a monthly feature.

IT'S interesting to study the cheese counters and to become acquainted with the different kinds of cheese. Process cheese is a mixture of different lots of natural cheeses melted and then poured into the tin foil-lined containers to harden. It does not dry out as quickly as natural cheese.

Cheese is high in food value. It takes about five quarts of milk to make one pound of cheese. Five ounces of cheese will provide as much calcium and protein as one quart of milk, or nearly one half of the amount of protein needed for a day by an average person. Besides being rich in calcium and phosphorus, protein and fat, it contains the milk vitamins as well.

Cheese may be served in many ways. A hearty cheese dish, such as Stuffed Eggs with Cheese Sauce and Rice, served with spinach or broccoli and a tossed green salad with whole wheat muffins or corn bread, will take the place of the more expensive meat and potato main course meal occasionally.

Quick main dishes using cheese are favorites for lunch or for the evening meal when supper is served. Try Grilled or Toasted Cheese Sandwiches, Cheese Rarebit, Scrambled Eggs, or an Omelet with shredded cheese stirred into the egg mixture, or waffles with cheese folded into the batter. French toast made of cheese sandwiches dipped into an egg and milk mixture and fried is an excellent way to use leftover cheese sandwiches.

Other dishes using cheese, which may be prepared ahead of time, include casserole dishes using layers of

cooked or canned fish and cheese sauce with buttered or cheese crumbs on top. Macaroni and cheese prepared for the oven the night before will take only a short time to heat through (until the sauce bubbles and the crumbs are brown).

To dress up cooked vegetables such as broccoli, asparagus, cauliflower, or onions, use a cheese sauce to add flavor and food value.

All cheese dishes are cooked at a low temperature, as a high temperature makes the cheese stringy. Grated Italian-type cheese adds flavor when sprinkled over spaghetti and meat sauce, or onto the toast rounds to top French onion soup.

Shredded cheddar cheese is often added to biscuit, muffin, or waffle mix.

Dried cheddar or swiss cheese may be added to toasted salads. Blue cheese crumbled into french dressing adds zest to a head lettuce salad.

The following cheese sauces are excellent to serve on toast or crackers, or with hard-cooked or devilled eggs on a platter covered with fluffy cooked rice.

RECIPES

Cheese Sauce

- | | |
|----------------|---------------------------|
| 3 T. table fat | 2 cups milk |
| 3 T. flour | 2 cups grated cheese |
| 1 T. salt | 1 T. Worcestershire sauce |
| 1/8 T. pepper | (optional) |

Melt fat, add flour and seasonings. Stir in milk (hot or cold) and when thickened add cheese and Worcestershire sauce if desired. Stir until well blended.

Tomato Cheese Sauce

- | | |
|--|---|
| 1 can (10 1/2 oz.)
tomato soup
(undiluted) | 1 T. Worcestershire sauce
(optional) |
| 1 T. chopped onion | 1 C. grated cheese |

Heat soup over water with onion and Worcestershire sauce, add cheese. Lower the heat and serve as soon as the cheese is well blended with the tomato mixture.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

The Rural Home

by Edna Cowper Laurie

IMAGINE writing about you, my dear. When I stop to consider, you do have a variety of good qualities. That is, when I close my mind to all your inescapable, blundering faults. You are many-sided. You, of intense stillness, except for the hum of a pump reassuring me that water will be there when taps are opened, are a peaceful ally. You, in the midst of a confusion of noises from sprayer, tractor, dogs, partyline telephone and innumerable jobs, are a tyrant and a jailer. Sometimes I adore you. Sometimes distaste for you is a mild term for my feelings.

Why is it that so many city people think an aged stone house in the country is the last word in architectural beauty, comfort and pleasant living? This shall be decided. You, built about 110 years ago, catching dust from the road or lying in wait for drifts, are to be discussed. Your solid stone walls, plaster on stone with no air space between, as old settlers built you, will have to show many advantages to offset one predominating fault, dampness. Upon my word, you can be as moody as your Mistress, sun-worshipper that you are. You show off all your glamour on beautiful days. To-day is an instance—the sun coming across the wide expanse of field in the west, looks in and beckons anyone near to stop and exclaim. How you are transformed and show your graces. As I am in a new hat, so are you in new curtains. Both take on new life, do we not?

A Haven in Every Season

Gifts from nature round about decorate you, according to season. Oh yes—blossoms, pussy willow, shiny apples, boughs—even pumpkins, so that you invite the question, "Do you get your decorating ideas from a book?" Oh, House in the Country, are you that individualistic? Of course! I can remember you exerting your charms on special days. You were superb on a Sunday in autumn, when the fire burned brightly in the fireplace and a crowd of young people rushed in with a bushel basket of corn for supper. You took over splendidly in July on Club day, when members of the W.I. sat on the sun porch overlooking the orchard and rose garden. You were a haven for Lady when she had her seven English Setter pups in a doorless cupboard in the "junk room". You acted as a hospital when our four children had measles all at the same time. Christmas Eves you are bewitching when spruce trees illuminate you, inside and out. Carols



echo through you and you give extra warmth and satisfaction to living.

But a Problem, Too

Maybe I am too complimentary. You have much room for improvement. Naturally, now, I shall mention the winters. You are utterly mean, then. To my mind, you are a spacious hovel which provides drafts. You hide behind snow banks from pleasant society. You collect dust from wood fires, smoke and ashes. You suggest improvement for which there are no funds. Home that you are for rural wage-earners, you are not the only building to be kept in repair. Cracks in your stone walls increase in number. During a westerly storm, your dormer window howls. Eerie sounds emphasize the loneliness of a farm house. At times, only the telephone saves us from complete isolation. Stoves in kitchen and hall have to be filled with wood up to bed-time. The hot-air furnace keeps fires longer owing to the huge logs which may be swallowed up in it. Our Orchard Home does not demand a man's attention in early morning as there are no livestock. For this reason, the mornings are cold at rising time, until the kitchen stove commences to heat as well as to cook. Lack of oil heating rests on the fact that acres and acres of bushland surround you, Home of mine.

Spring in and around a rural dwelling can be more enjoyable than in most places. Doors and windows are open to air and sunshine. There is a feeling of something imminent, something wonderful about to happen. It does.

Buds burst into blossom, trees leaf out, scents are wafted on air. It is entrancing to walk through an Orchard in bloom, to watch bees at work, and to try to estimate the size and quantity of the fruit crop which will be produced. Inside, too, colour is rampant. Your walls are April greens and sunshine yellows. Braided rugs take on glory beyond their desserts. Books are everywhere. You have personality and a lived-in appearance. An item of interest is a little cupboard built into the dining-room wall. Glass doors encase pretty cups and saucers. Facing it, as one enters, it gives the effect of a piece of Dresden China.

Spacious — but Inconvenient

A feeling of security lies within your walls, even on days when threatening news of the world reaches one's ears. Interest, amounting to fascination, draws acquaintances and friends to one's fireside. One day a double apple on one stem is to be seen, another day brings forth a potato of mammoth proportions or a rare rose. Besides horticultural discoveries, we sometimes display objects fashioned from beautifully-grained wood from our property and shaped by the boy of the family. Again, it might be wool pictures woven by one of the girls.

On the other hand, creosote and a musty smell, which seeps into clothes, closets, is one of your ailments. Tarnish appears on silver articles on your shelves. The very air is contaminated by poisonous sprays when work on trees goes on.

Your cellar stores home-grown potatoes in bins on the cement floor. Apples keep better in the basement of the packing house. From the moment the first green one is the size of a small egg, apples are received, dumped might be a better word, into your kitchen, to be used or wasted. Jelly, beyond the needs of the household, is made and stored in the cellar—along with jams, pickles and canned vegetables.

Oh dear, your kitchen is a problem. It is planned, yes, planned to be inconvenient. Shortage of cupboards, the sink at the dark end and the wood box filling up valuable space, make one realize that "It is the little things that create differences". Maybe a dream of better conditions will come true this year. A wall may be pushed out for greater space. Later, plumbing may be altered.

Discomforts there are, but, dear old Home, things have improved. I can remember times when the lack of water was a tragedy. Care had to be taken at all moments. Three of the children would be bathed at the same time. The water left in the bath would then be used for flushing the toilet. Now, your cellar houses two electric pumps, one which draws hard, cold drinking water from a 130 foot drilled well and the other, which pumps rain water from an immense, outdoor, underground cistern. Water is available at any time for all demands, including garden hose or filling sprayers.

Electric power in your broad interior means a great deal to your owners and family. Washing machine,

refrigerator, iron, vacuum and light keep me realizing and being grateful that the country is as far ahead as the city today in labour-saving devices. Another aid is my pressure cooker which lessens time spent in the heat. The radio is an added boon. Television would not do for your Mistress, who likes to fly round doing things while she catches news, affairs of (world) women and music, while she works.

Some things, common to old country homes, you were always prey to. One is having the back doors receive all the attention from the outside world. I have often wondered how many know we have a front entrance. Another thing is having to close off the cold part of the house. This means that your attractive living-room, with its beamed ceiling, its chesterfield and chairs in colourful coverings, ivy trailing over curtains from brackets, held no comforts for everyday usage, in winter.

You were never kind to the kiddies. You lacked a suitable place to play, for school work and for handicrafts. The dining-room with its straight-backed chairs, its doors closed to drafts, was the family all-purpose room. "You are a summer house only", Peggy always said. Another chair which claims attention is the Morris chair. When the "Pater Familias" is not installed in it, the cat or the dog takes over, depending on which gets there first.

When the pros and cons are considered, in the case of a rural home, you have many "pros". A piano is not a formidable foe as it too often is in a small city home. It is a cherished possession. In view of your size, memories may be kept in an attic.

In simple words, you, Rural Home, are not simply a house. Work revolves round about you. Both man and woman-power are put into you. You are the finished product of that power. You are a home.



Mrs. J. W. Westover, Brome County president, in the dress worn at the celebration of the 150th anniversary of the town of Sutton. The dress dates from 1835. The Sutton W.I. sponsored one evening of the week's entertainment which was so successful it was repeated by request the following night that week.

The Month With The W.I.

Co-operation again from the branches! Reports show the assessment of 20 cents per member, to assist with Quebec's share of the ACWW Conference expenses, is being met. The early deadline set by the Q.W.I. (Sept. 1) was much appreciated by the National Committee in charge of this fund and the chairman, Mrs. A. A. Shaw, Vancouver, states she hopes it will be an example for the other provinces.

Argenteuil: *Arundel* made plans to start a scholarship fund under the direction of Mrs. E. A. Bailey and completed plans for the school fair. *Brownsburg* members exhibited at the Ottawa Exhibition and many attended. *Jerusalem-Bethany* heard a resumé of the work of the branch since its organization in 1919. \$5 was voted for the progress prize in Lachute High School and \$10 to the school fair. *Lakefield* held its meeting at the summer home of Mrs. R. McOuat. *Mille Isles* sponsored a community picnic. The guest speaker, Mr. A. Bothwell, gave a talk on "Wheat".

Bonaventure: This month's article for the broadcast was prepared by Mrs. John Franklin. *Black Cape* held the annual garden party and realized \$68.10. *Grand Cascapedia* has given prizes to the local school and used a film on their programme, "Sanitation and Purifying of Water". *New Richmond* had a course in rug-making given by Miss Bruneau, who spent five weeks in this county. Ten girls in *Matapedia* took the leather work course. *New Carlisle*, *Shigawake* and *Port Daniel* also benefited from these courses. *Restigouche* members are looking forward to a turkey raising project in the spring. The delegate, Mrs. H. Hoare, reported on the convention. *Shigawake* expressed much regret that a valuable member is leaving the community.

Chat.-Huntingdon: *Aubrey-Riverfield* realized \$18.85 from their auction sale. *Dundee* had a discussion on "The Increased Cost of Beginning to Farm", which was led by Mrs. T. Stowell, who also conducted a quiz, Mrs.



Nearing the close of a busy day. Austin W.I. holds its annual school fair at the Community Hall, "with the usual success", the report states.

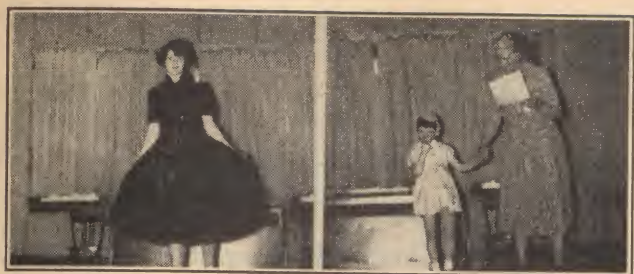


Wright and Kazabazua branches joined in a farewell picnic for a valued member, Mrs. H. Ellard, who was moving to Ottawa. The guest of honour was presented with a travelling bag and is shown in centre of the picture with her gift. Miss Derby, president of Wright W.I., is on her left and Mrs. Carruthers, Kazabazua, is on her right. Mrs. Ellard is past president of Gatineau County W.I. and provincial second vice-president. Q.W.I. members will be glad to hear she is retaining her membership in this province.

Smallman winning the prize. *Franklin Centre* held a picnic where games, causing much amusement, were played. "The Story of Tea", was read by Mrs. C. Waller. Other readings were given by Mrs. W. Blair and Mrs. R. J. Blair, and a demonstration on crocheted edges was given by Mrs. A. Renaud. *Hemmingford* held their picnic at Fraser's Point. Committees were chosen for Havelock Fair and the school fair. *Howick* was entertained by *Aubrey-Riverfield* at a joint picnic meeting. A humorous reading, "I Love Middle Age", was given by Mrs. Janet Reddick. *Orms town* has been canning fruits and vegetables for the High School Cafeteria, also some food was put in the locker. Mr. Alton Barrington, owner of the locker, gave a talk on preparing food for this purpose. Greetings were sent to Mrs. C. Moe, who was celebrating her 100th birthday.

Compton: *Bury* entertained the members of the *Brookbury* branch and made plans to attend the *Scots town* meeting. A letter was read from a boy in Korea to whom a parcel had been sent. Two quilts were donated by a member to be given to a family who had been burned out. *Bury Juniors* had an enjoyable camping trip at a lake, accompanied by their counsellor. Hiking, boating, swimming and a marshmallow and weiner roast were some of their activities. *Canterbury* sent a box to Korea and another to England. *East Clifton* gave prizes for the *Cookshire Fair*. The Hon. C. D. French has donated aluminum paint for the community hall roof. All branches in this county contributed a generous supply of clothing, toilet articles and other necessities for a large package sent to Save the Children Fund.

Gaspe: All four branches attended the county picnic. *Sandy Beach* heard a report of the convention. \$19.20 has been raised for the funds and \$5 donated to the Red Cross. *Wakeham* The county president, Mrs. Eden, reported the convention here. The U.N. flag, made by



The Sherbrooke County W.I. sponsor a fashion show of articles of clothing made from feed bags, through the courtesy of the Dominion Textile Co. One of the afternoon dresses is modelled here. The small model welcomes a reassuring hand. Mrs. A. Parsons, president Ascot W.I., who acted as commentator, was assisted in the demonstration by Mrs. W. Billings, president Brompton Road W.I.

this branch, was displayed at the Handicraft Exhibition held at the College at that time. A current events quiz was conducted by one of the members and a report given by the committee preparing the branch history.

Gatineau: Aylmer East celebrated grandmother's day by a picnic, when each guest of honour was presented with a corsage. Eardley heard a paper, "Poultry Raising as a Hobby or a Financial Asset on the Farm", also a poem, "A Friend Who Just Stands By". A contest, "Floral Centrepieces", was held and a mystery prize realized \$1.80. This branch exhibited at the Ottawa Exhibition. Kazabazua, another exhibitor at Ottawa, won prizes in five classes, their needlepoint wall motto taking a first. Lakeview members brought in donations of canned goods for Christmas boxes. Several from this branch attended the W.I. tea at the Ottawa Exhibition. Rupert exhibited articles at Aylmer Fair and voted \$20 for the purchase of bulbs to be planted in the local cemetery. This branch catered to the plowing match held by the Lower Gatineau Plowmen's Association. Wakefield held a garden party on the grounds of the Gatineau Memorial Hospital in aid of that institution, netting over \$500. Wright joined with the Kazabazua branch for a picnic at Wright, when Mrs. H. Ellard was guest of honour. (See picture) A grab bag sale realized \$8.30 for the funds.

Jacques Cartier: Ste. Annes held an exhibit of flowers and vegetables grown from seeds supplied by the Prov. Dept. of Agriculture. House plants were also sold.

Missisquoi: Cowansville held a picnic at Mrs. Foster's farm. The school gardens have been judged and the names of those with highest standing forwarded to the agronomer. Dunham members were invited to the celebration of the 150th anniversary of Sutton. Two papers; "The Royal Look Favoured by U.K. Styles", and "Teach the Child to Economize but don't Suggest Hoarding", were given by the Home Economics Convenor, Mrs. M. Doherty, who also gave an outline of her work. Fordyce held a picnic with friends and children as guests. Two contests were held and an exchange of gifts. Stanbridge East entertained the Home Demonstration group from Franklin County, Vt. Two Norwegian

girls, who are spending some time in the United States under the Security Agency Program, were in the visiting group and gave talks on "Life in Norway" and "Home Economics" as taught in their schools.

Papineau: Lochaber members were guests of the Ridge W.I., East Carleton, Ont., when a very pleasant evening was spent. Mrs. G. Hardy gave a descriptive talk on her trip to Vancouver, Mexico, and Texas, showing souvenirs of various places visited en route. A paper on "Agriculture" was read and a letter from the little French girl sponsored by the Lochaber W.I. It was decided to continue this project.

Pontiac: Bristol heard an address, "The Finished Product of Education", by Mr. Allan Young of Shawville. The programme featured Education and was in charge of the convenor, Mrs. Ruby Armstrong. Clarendon members discussed "What can the W.I. do for Community Welfare?" A parcel post sale was held. Elmside made plans for the annual school fair and completed plans for exhibits at the fall fairs. Two contests were held and excerpts from the Annual Report were read by the president. Shawville visited the hydro development at Chenaux, under the guidance of Mr. C. W. Johnston. Arrangements were completed for exhibits at fall fairs. At Wyman a paper, "Home Treatment of Rural Water Supplies", was read by the president. A cookbook has been prepared which is now ready for printing.

Rouville: Abbotsford's entertainment period was given over to choral singing under the direction of Miss Helen Buzzell. New window shades have been given the Parish hall.

Richmond: Cleveland exchanged recipes for summer drinks. The convenor of Welfare and Health gave a reading, distributed pamphlets on Cancer, and held a health quiz. Tuberous begonias were judged and three prizes given. Denison Mills made plans to hold a dance in the community hall. Gore distributed pamphlets on, "Care of House Plants", Nutrition and Food. A quilt is being made for sale. Melbourne Ridge held its school fair. A supper is to be held to celebrate the 30th anniversary of the branch. The program was in charge of the convenor of Welfare and Health, who read a paper and a poem, and a donation of crocheted lace was received. Richmond Hill exchanged recipes for frostings and held a candy sale. Richmond Young W.I. made plans for rug making and Singer Sewing Machine demonstrations. A contest on home made cookies was held. Shipton planned an ice cream social and held a picnic for the members. Windsor Mills had a garden party, the proceeds netting \$39.25. A picnic was held jointly with St. Andrews United Church. At the meeting the past president, a charter member, Mrs. L. E. Wheeler was appointed honorary vice-president, and prizes were given for a flower display.

Shefford: Granby Hill is making aprons and other articles for the fall sale. Cotton and linen are being

sent to the Cancer Society and donations were received. *South Roxton* heard a paper on "The Farm Woodlot", and *Warden* made plans for entertaining the county semi-annual. Quilting was done on the quilt for the Tweedsmuir competition. (This is now in the office).

Sherbrooke: Ascot made plans for the booth at the fair and the articles were brought in. A miscellaneous shower was given a bride-to-be, daughter of a member, and a donation made to the European Child County Fund. *Brompton Road* held its annual flower show. An article, "Electronic Brain", was read by Mrs. Murdo McLeod, convenor of Education, and a paper on the Peace Garden by Mrs. C. Sawyer. Hints on Publicity were given by Mrs. Decoteau. A nurse's bursary for Miss Irma Arbrey and donations of \$10 for school fair prizes and \$5 to the Bible Society were voted. *Belvidere* held a rummage sale and phantom tea. A picnic was held, the refreshments provided by the losers of the attendance contest. *Cherry River* has been preparing a quilt. A surprise package is furnished and a contest held each month to raise money. *Milby* purchased gifts for two babies and entertained the county quarterly meeting. *Orford* is planning a handicraft course. A donation of \$5 was voted the school fair and \$3.58 to the European Child Fund.

The Tweedsmuir Competition

All entries in the quilt and history sections of the Tweedsmuir Competition must be in the Q.W.I. office by Feb. 1, 1953. Branches wishing details may obtain them from this office, or from the provincial convenor of Education, Miss Verna Hatch, R.R.3, Sherbrooke, who is in charge of this project for the Q.W.I. Forewords and pictures of Mrs. Hoodless, and Lord and Lady Tweedsmuir to be used in the histories, can be had at the office, price for the set, 5 cents.

There was only one entry in the essay section. Mrs. D. M. Laurie, Hemmingford, submitted one this past spring, that section closed early as the national winners had to be sent on for the international contest. We are pleased that space could be found in this issue of the Journal to print this essay, which in spite of the fact it did not receive a national prize was returned with the notation "very good". The winner was Mrs. Leigh D. Long, Kempt, Queens County, N.S. and honourable mention, Mrs. Bruce Edie, Dugald, Man. Only 14 entries were sent in for the essay section. There were none from Newfoundland and Prince Edward Island, and only one each from Quebec and Alberta.

The Q.W.I. executive is hopeful more interest will be shown in the other sections and Miss Hatch, in her outline of work for Education, urges all branches to enter the Tweedsmuir Competition.

Scholarships Awarded

Winners of the awards offered annually by the Quebec Women's Institutes in the School of Household Science,

Macdonald College, have been announced. Miss Lorna E. Fleming, Dundee, receives the Macfarlane Memorial and Miss Gertrude E. McEwen, Buckingham, the Mrs. Alfred Watt Memorial. Both girls were highly recommended for these scholarships by the staff of that Department and the Q.W.I. was pleased to confirm the selection.

Equal pleasure is expressed in the choice of candidate for the Q.W.I. Agricultural Bursary in the Diploma Course. This was won by Ralph R. Craig, Ormstown.

The good wishes of the Q.W.I. for continued success go to these young people as they pursue their studies at Macdonald College.

A Paying Project

An interesting project for raising funds for the Scotstown Women's Institute is now celebrating its fifth year. This is the W.I. Gift Shop, run by members of the local branch for the benefit of the Smith Memorial Foundation, itself an institution sponsored by the W.I.

This shop had its beginning as a Trift Shop in the years when materials and replacements were hard to obtain. This aspect of the venture has been concluded and the shop is now selling only new articles. It caters to every member of the family and to varied tastes. On its shelves are found linens; wool, hand knitted and hand woven articles, toys, toilet goods, greeting cards, note-paper, notions, and particularly lovely china and ornaments. These include English china, Hummel figures, Royal Doulton, Crown Staffordshire, Italian ware, and glassware. Kitchen specialties are also for sale.

There is one permanent employee, a member of the W.I., who keeps the shop open every afternoon and three evenings a week. Other members assist, especially at Christmas time. The shop will be opened at special request in the morning.

Members of the W.I. and others are invited to send in handmade articles. For selling these the shop deducts 20% commission.



Strippings

by Gordon W. Geddes

We have just been reversing our usual programme and indulging in a deliberate spree of top-soil erosion instead of doing our best to prevent this happening. However there was method in our madness though the net results are still one of those gambles which the farmer always has to take. We are hoping that there is enough good gravel under that top-soil to be worth more than what we could grow there. Of course, as is usually the case in such spots, that soil wasn't very good anyway. Many people have found that "thar's gold in them thar hills" if there is depth enough of good gravel in an accessible location. We tried one a few years ago but about all we got from it was a better road for the cattle to the pasture and a chance to get a bulldozer near enough so we could hire it to push out some rocks. The latter benefit we also made use of this time for we got seven big ones, and I do mean big ones, pushed out of the way for seven dollars.

Once again we had good luck with combining our oats. The man who does it traded for a self-propelled one this year which is really the thing to have. It is easier to move, works faster and can go in any direction to get the grain. It is also a good hunter as they killed a skunk with it in one of our fields. It couldn't hunt out as many oats as last year but that was the fault of the weather, not the machine. A small early field turned out well and one of the late ones but the other two had a very small yield of both straw and grain. We have seen the time when we had more straw than we wanted and wished we had an excuse to get some sawdust. But that was before we began to cut the straw. Now we couldn't have too much as you can store a lot of it in a small space and be ready for winter. The sawdust is good but you can't always find it when you need it.

We tackled our worst piece of pasture this fall to try and get some fall rye on it ready to seed down next spring. Most of it is too hilly to use the tractor so it has been slow work. About a third of it was seeded two weeks ago after a coat of lime and ashes, manure and fertilizer. Even before the crop came up it looked so much better than the rest of it with the bushes and weeds plowed under, that we decided to try some more. The second third we managed to do with the tractor but the last one was a horse job again. It isn't seeded yet as we want some lime for it which

should be along any day. That part won't give much pasture this fall as it will be a month late in planting. But if it will give as good a preparation for a catch of grass and clover as we got last year with one sowed still later (the middle of October) we shall be well satisfied. We have always got a good stand that way but previously we have harrowed it up. Last year we sowed the small seeds right in the rye early in the spring and were quite successful. This time we have a small spot left that we didn't plow after I tipped the plow bottom side up trying to do it. I

**YOU HAVE ALL THE EXTRAS
WHEN YOU WEAR...**



**MINER
Weatherseal
RUBBERS**

- EXTRA PROTECTION
- EXTRA HEAVY WEAR
- EXTRA EASY COMFORT
- EXTRA ECONOMY AND VALUE



THE MINER RUBBER COMPANY LIMITED

think we shall fertilize it and scratch it up with a harrow and seed it next spring with the rest. "Use the weeds for a nurse crop" as one man put it about a rocky hill.

George and Mac came here for Mac to get some experience. Now they have gone elsewhere for Mac to cash in on his experience. Alex Lacasse is now helping us. As he is experienced in handling a tractor, perhaps I shall not learn to plow with one this fall after all. So far I have been working at horse jobs and he has been plowing. The first stubble field we plowed was harrowed in the hope that some of the mustard seed would germinate. All the oats left by the combine did but there hasn't been much mustard to date. If the stuff would be more accommodating, the frost would do a cheap job of killing it for us. Alex has just come back from a walk across the field and says that the mustard is starting now for us. Thanks, Mustard!

When we were getting the first piece ready for rye a pasture salesman

came along to sell me a special mixture for long lasting pasture. To me it sounded as if he was selling a little grass seed and a lot of hokey. He claims a lot of pasture experience but wouldn't say that his mixture was made to stand our climate. He liked the idea of sowing rye first but thought it should be well harrowed in before seeding down in the spring. We formed the opinion some time ago that a fine seed bed was not essential to getting a good catch for pasture and might even be detrimental on a hillside. Reading Louis Bromfield suggested it to us and experience strengthened the idea. We got some fine catches by scratching up rye stubble after it began to go by, with a harrow and seeding. This made the seeding very late, after the middle of June. This year it was done early and the only harrowing was as the disc drill went over it set lightly.

Perhaps another time I might find that the season had a part in the good catch for some things certainly did much better than last year. Tomatoes, squash, etc. were a failure last year in spite of all our efforts. This year we just planted them and forgot them and they grow. Dot never thought she could have too many tomatoes but this year she almost has. Winter apples will be at a premium with us but the fall ones were good. Perhaps they were not too good everywhere as the market seemed to be better than sometimes.

One couldn't say the same for the market for Jersey bulls as we sent two with Silver Medal backing to Montreal for the huge sum of \$106 for the pair. I do not understand why it costs so much more to sell cattle in there than it does hogs. The selling charge was \$2.25 each in addition to the shipping charge.

Stored Grain Insects Cause Millions In Food Losses

A hungry horde of seldom-seen "consumers" is waiting anxiously to devour a large portion of Canada's 1952 grain crop. You don't often see them because they're lurking in the dark shadows of granaries, grain elevators, storage bins, flour and feed mills. They are the countless billions of stored grain insects which gobble up millions of dollars worth of grain products annually.

"Loss through the ravages of stored grain insects could be greatly reduced at little cost by the application of the new organic residual insecticides," says J. A. Oakley, entomologist of C-I-L's agricultural chemicals department.

Since stored grain insects hide and breed in cracks between wooden planks of storage buildings, he recommends the use of a 50 per cent methoxychlor wettable powder as a spray on infested walls and floors before grain or grain products are stored. A spray consisting of two pounds of 50 per cent methoxychlor wettable powder in five gallons of water is sufficient to spray 3,000 square feet of floor and wall surface.

In addition to using methoxychlor spray other measures should be taken to make a grain storage building pest-proof, Mr. Oakley says.

Bins should be rat and mouse-proof; birds should have no access to bins; bins should be cleared after emptying or before filling — especially the cracks; accumulations of waste grains or mill cereal products beneath the bins or on driveways between bins and nearby buildings should be removed; only dry grain should be stored; bins should be inspected once a month and fumigated in cases of severe infestation.

Insects which cause most damage to Canadian stored grain products are the red flour beetle, the confused flour beetle, the Cadelle, the rice weevil (which attacks all grains) the granary weevil, the saw-toothed grain beetle, and the yellow and dark mealworm.

GREENMELK
COMPANY LIMITED

PRODUCERS OF
Dehydrated

CLOVERS
& GRASSES
ALFALFA
&
CEROGRAS

FOR LIVESTOCK AND
POULTRY FEEDS



WALLACEBURG, ONTARIO

Something New in Metals

A remarkable new metal promises to revolutionize the farm implement industry. The International Nickel Company of Canada's researchers have developed a ductile cast iron which is not brittle like ordinary cast iron, but can be bent or twisted. At least as strong and practically as tough as cast carbon steel, "ductile" has cast irons advantages of availability, ease of founding and machinability. It has been described by foundry men as one of the greatest metallurgical strides of the century.

One manufacturer of ductile iron plowshares is offering them with an unconditional guarantee against breakage. Indications are that the new material is ideal for many farm machinery and tractor parts, clutch plates, gears, etc. It is in one condition especially suited to applications where maximum wear resistance is needed.

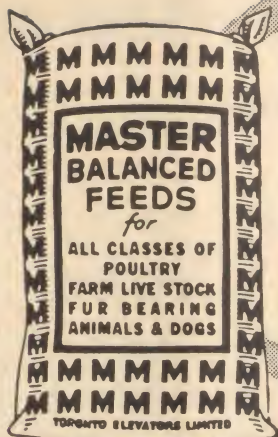
Actually, ductile is not a single product, but a family of irons whose metallurgical structure has been revolutionized by the introduction of magnesium. More than 300 foundries in a dozen different countries (five companies in Canada) are producing it under licence from International Nickel.



FOR SALE AT ALL CANADIAN NATIONAL
RAILWAYS STATIONS AND EXPRESS OFFICES

MASTER

FEEDS FOR RESULTS



SEE YOUR MASTER DEALER

TE-3

TORONTO ELEVATORS LIMITED TORONTO MONTREAL

Irrigation In Canada

Nearly a million acres of Canada's farm and may be classed as "irrigated land". On these so-called irrigation farms it is necessary to apply water artificially in order to produce satisfactory yields of crops. The existing type of agriculture on such farms could not be maintained without irrigation. Two outstanding examples are the fruit producing area of the Okanagan Valley in British Columbia and the sugar beet and canning crop development in Southern Alberta. In addition to these full fledged irrigation farms, which usually occur in organized irrigation district, there are many thousands of acres in the relatively humid areas which normally produce fair yields but production may be greatly increased if some supplementary water is provided during abnormally dry periods. The tobacco farms of Southern Ontario and the dairy cattle pastures of the Fraser Valley in British Columbia are in this category.

In the semi-arid regions where extensive irrigation structures have been built, an intensive type of agriculture has developed, says K. W. Hill, an Agricultural Engineer at the Central Experimental Farm, Ottawa. Individual farms are about 100 acres in size and have an average resident population of six people. An average farm produces each year on 30 acres enough sugar for the annual consumption of 1,000 people enough

canned peas on 20 acres for several thousand people. The by-products from these specialty crops together with grain and roughage produced on the balance of the farm provide sufficient feed to produce enough beef for the annual average consumption of 600 Canadians. Agricultural production under irrigation is a very stable enterprise, as the semi-arid lands in the prairie provinces generally have very fertile soil and favourable climatic factors, except precipitation. When water is provided by irrigation abundant crops are produced every year. This makes for stability in farming and encourages the development of processing industries which must have a guaranteed annual supply of annual supply of raw products.

Statistics from Alberta show that irrigated land makes up only 3 per cent of the cultivated land of the province, but this amount of land contributes 10 per cent of the provincial agricultural production.

Mr. Hill comments that a half century with successful crop production has fully justified the establishment of large scale irrigation projects in Western Canada. The introduction of portable aluminum pipe and the development in engineering and power supplies has greatly increased the area where supplementary irrigation water can be profitably applied. It seems evident that the irrigated acreage of Canada will continue to expand for some time to come.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

The Holstein Crowd Had Fun

IT'S almost fifteen years since the Quebec Holstein Breeders' Association got together for a provincial picnic and field-day, so one might have expected something special. And something special it certainly was. The site was on W. K. MacLeod's Lake Aylmer Farm at Disraeli, and Holstein men and their families from as far away as Riviere du Loup were on hand to help make it a success. Cabinet Ministers, members of parliament, and many other distinguished visitors were welcomed. It's hard to say exactly how many people were there, but they ran out of buttons at the gate after they had distributed 3000, and one estimate put the number of parked cars at over 1000.

Much credit is due to the organizers of the affair, who kept everything running smoothly and on schedule. Mr. MacLeod's men had put in a lot of work getting the grounds in order, putting up tents and other shelters, and Hermas Lajoie, the ebullient provincial secretary, had things well in hand all day and everything went like clockwork.

The morning was pretty well taken up with arrival, registration, and a demonstration of type classification by Prof. Toupin. Then the visitors were given the chance to judge a class of four Holstein cows, with various prizes as their rewards. Twenty-three perfect scores were turned in. To make it a bit more interesting, the judging contest was divided into three classes; for bachelors, for married



Contestants in the judging event got right down to work.

men, and for ladies. Those who wished could take part in a guessing contest (the number of beans of assorted kinds in a big glass jar) or buy raffle tickets on a young bull donated by Mr. MacLeod, with the proceeds of the raffle going to the St. Francis Club.

Everyone had been warned to bring their own lunch, but hot-dogs, French fries, ice-cream and pop were available, free, to all comers, served in one of the several tents that dotted the farm yard. And to cap it all, a brass band provided music throughout the day.

After lunch the serious work of the day began; by this time practically all the guests had had the chance to tour the farm buildings, look over the stock, examine the farm machinery exhibit put on by Massey Harris, and most of the people were glad enough to sit down for a while in front of the speakers' stand, in front of which the judging ring was placed. One of the features of the afternoon was the inter-club judging contest, in which representatives of thirteen Holstein clubs took part, in teams of three: St. Hyacinthe, Two-Mountains, St. Jean, Bois Francs, Nicolet-Yamaska, Levis-Bellechasse, Quebec, Three Rivers, Lachute, Lotbiniere, Vaudreuil, St. Francois and Joliette. Each team was split up before the judging started so that no two members of any one team were in the same group; they had twenty minutes to judge the class, and were scored 50% for placings and 50% for reasons. The official placing was done by Tom Cleland of the Brown Corporation farm, and the National



This is only a small part of the crowd around the ring, watching the judging contest. Other guests in the background are examining the farm buildings.

President and Secretary, Messrs Henry and Clemons. The event was won by the Quebec team of Armand Laliberté, Laureat Couture and Albert Sansfacon.

Then came the speeches, without which no big picnic can be a success. There were a lot of them, but they were all short and to the point, and the crowd enjoyed them hugely. J. S. Bourque, Minister of Lands and Forests, led off with a tribute to Mr. MacLeod, who . . . "operates his farm not primarily to make money, but because he has confidence in his province and his country." George Henry, the National president, and the National secretary, George Clemons, both had come down from headquarters to attend, and had high praise for the work of Holstein breeders in Quebec. Both promised to take back a glowing report on Holstein activities in this province.

The Hon. Elie, Armand Pilon, the provincial president, Joseph Lafontaine, Federal Member of Parliament for Wolfe County, L. E. Boutin, the county agronome, Rev. Dollard Godin, the parish priest, and Henri Heon, representing the Federal Department of Agriculture.

Two young Holstein bull calves, donated by Raymondale Farm and by J. L. Guilbert's Des Eglantiers Farm, were up as attendance prizes, and were drawn for during the afternoon. Albert Fleck of Lennoxville won the Raymondale calf, and Wilbrod Gregoire of nearby Garthby had the winning number for the Guilbert calf. The raffle calf was won by R. Legare of Princeville; the raffle raised some \$1500, by the way. There were also a number of prizes for the general judging contest, for the bean guessing contest and for other events.

The official business of the day concluded with a parade of some of the top animals from Mr. MacLeod's herd, including Grand Rang Caesar Ajax Tensen, Senior and Grand champion at Sherbrooke and Quebec in 1952, and Devon Mona Korndyke, Grand champion at Sherbrooke and Quebec this year, and twelve others.



Mr. MacLeod presents the judging trophy. Left to right are Hon. J. S. Bourque, Mrs. MacLeod, L. Couture, Mr. MacLeod, A. Laliberté, Hon. Antonio Elie and Albert Sansfacon.

Mr. MacLeod bought Lake Aylmer Farm in 1945. There are about 1400 acres in the property, 180 of which are cultivated, and 75 of these are in permanent pasture. He has 71 head of Holsteins, and 56 head of Aberdeen Angus beef cattle. He keeps 5 horses for general work, and there are 25 brood sows and something like 1000 pigs on the place.

His interest in farming, and Holstein breeding in particular, can be judged by the fact that he footed the bills for the whole picnic; got the place ready, donated the food, put up money for prizes, supplied a calf for one of the door prizes and gave the trophy for the judging contest. He and Mrs. MacLeod were much in evidence the whole day, being the perfect hosts, and their generous hospitality was warmly appreciated by the whole gathering.



The host — W. K. MacLeod.

A Brief Back Glance at the Quebec Fair

Exhibits presented at this year's Provincial Exhibition at Quebec were drawn from practically every farming district in the province. For the first time for a number of years there were exhibits of Canadian cattle from the Lake St. John district, which held their own with those from around Quebec, St. Hyacinthe and the lower St. Lawrence. Sixth and seventh prizes were won by exhibits of the Ursuline Sisters of Roberval; Bertrand Hudon of Metabetchouan took a third and the Oblate Fathers of Pointe Bleue were awarded a sixth place ribbon.

Elie Tremblay of St. Jerome, Osias Tremblay, L. A. Desbiens and Fernand Caron of St. Bruno all showed beautiful specimens of Percherons. Belle Hero, the mare shown by L. A. Desbiens, won the Osias Tremblay trophy offered by the Quebec Percheron Breeders' Association and was adjudged grand champion. It was evident that the quality of horses being raised in this province is not suffering.

Holstein herds came from a number of the good farms in Quebec district, in the Bois Francs and the St. Hyacinthe area, and the Jersey show brought out strong exhibits from the Eastern Townships as well as the St. Hyacinthe and Quebec districts. Ayrshires were out in the greatest numbers, representing the better herds of the Quebec area, the Richelieu Valley and the Eastern Townships.

The industrial building was well filled with exhibits of the various local firms, and handicraft studios had their usual colourful displays. The exhibit of the Department of Colonization was a real crowd-stopper. Their big booth was taken up with a beautifully constructed landscape model showing the differences between old-time and present day roads, farm equipment, clearing methods and so forth. Everything ran by clockwork, even the ox-team turning the windlass hauling out miniature stumps.

The Quebec Exhibition always has a theme, and whenever possible the theme is reflected in the arrangements of exhibits. This year the Exhibition was honouring Laval University's Centenary, which did not lend itself to any particular display, except in the ornamental plantings in front of the main building. Most of the free space around the buildings was taken up with displays of farm machinery—never have we seen so many tractors, combines, mowers, bulldozers on a fair grounds before. Even firefighting equipment and heavy road-building machines were on display.

Since our September deadline always comes just before the fair opens, any report on the Quebec fair must of necessity be late; hence it seems hardly worth while to make any detailed report on judging results. The highlights, however, are given below.

At the top of the classes for Canadians were L. A. Sylvestre, who had the junior champion bull, Sylvestre 10F; Lucien Drolet of Neuville, reserve junior bull, La Gorgendiere Bijou; Albani Nichols of La Presentation, who showed Carlos des Etangs for the grand championship and the Deschambault Farm School, which had junior, senior and grand championships in the female classes.



Roland Pigeon of Vercheres won the Premier Exhibitor Trophy at Quebec. Our photo shows, left to right, J. Pichette, Mr. Pigeon, Francois Boulais, Secretary of the Quebec Ayrshire Society, Robert Seitz, judge, Rev. Leon, vice-president of the Quebec Ayrshire Society, and Nicholas Kelly, president.



Part of the heavy machinery exhibit at Quebec Fair.

In the Holsteins classes the grand champion ribbon in the male classes went to W. K. MacLeod's Grand Rang Caesar Ajax Tensen, and Laurent Gauthier of St. Thomas d'Aquin had the junior championship on Gauthier John Sterling, a young bull less than a year old. MacLeod also had the grand champion female Devon Mona Korndyke.

Ayrshire championships went to The Quebec General Hospital, male junior and grand championship on Des Islets Eclair; to J. W. McGillvray & Son, reserve junior male, on Glencameron Royal Buster and reserve senior champion male, Cherry Bank Perfect Peace. The senior champion male was R. Pigeon's de Vercheres Carabin. The female junior champion was J. P. Lagacé's Alderwood Royal Echo, and reserve was St. Blain Valentine for Clement Beauchemin. Senior and grand champion female was Championne de Leader Levisienne, shown by the College de Levis, and reserve was Roland Pigeon's De Vercheres Denise.

Pierre Veillon's Jerseys carried off the main awards in this breed. He had the junior male champion, Wendybrook Pan, the senior bull, Vintage Master, the junior female, Basil's Patricia and all but progeny of dam in the group classes. J. P. Dubuc had the reserve junior male and female, and the grand champion and reserve grand in the female class on Pinetree Spotlight Milky and Pinetree B. Lottie.

Horses

In Canadian horses, Ernest Cote of Ile Verte had the champion stallion, Thomas de Viger, and the champion mare was Ernest Sylvestre's Mignonne de la Victoire.

Gilbert Arnold had the champions in Belgians, the champion Percheron and Clydesdale stallions. L. A. Desbiens of St. Bruno had the champion Percheron mare and Maurice Desautels the champion Clydesdale mare.

A New Soil Conditioner

A new organic chemical soil conditioner which converts hard-packing clay into easy-to-work soil and retards wind and water erosion by increasing the water-absorption properties of wornout land, will be introduced in Canada soon by Canadian Industries Limited.

Having as its active ingredient the chemical, sodium polyacrylate, it will be marketed under the trade name "Loxar".

According to G. R. Snyder, soil chemist of C-I-L's agricultural chemicals department, "Loxar" can change the mechanical structure of poor soils such as clay from a hard-packing mass into a crumbly material which permits water and air to filter down to plant roots in a sieve-like action. This gives roots a chance to breathe and makes nutrients in the soil more available to the plant.

Explaining the action of the chemical, Mr. Snyder said that good soil structure depends on the arrangement of soil particles. Good soils consist of small granules ranging in size from pin heads to peas. These granules are formed by natural soil-binding gums which "glue" the particles together.

The gums are a minor by-product of the decomposition of manures, composts, plant and other organic matter. Normally, this action does not supply enough natural gums to constantly cultivated soils. Through use, they also break down and are decomposed by soil bacteria and require replacement.

"Loxar", Mr. Snyder said, "replaces natural gum after they have been exhausted. One pound of the chemical will have as beneficial an effect on soil structure as 100 to 1,000 pounds of any of the humus type materials. It will be most useful on heavy clay and alkaline soils, loams and sandy loams which have been depleted of their organic content."

The soil conditioner comes in a dry ready-to-use form. One pound is sufficient to treat 100 square feet of soil. Before it is applied, the land should be dry and in a prepared state for seeding. After it is spread, the conditioner should be well worked into the soil. Most of the stabilizing or binding effect of the soil conditioner takes place within 24 hours of treatment and during this period the soil should not be worked.

Only limited quantities of the soil chemical will be available this year. It is being recommended for use in flower and vegetable gardens, for preparing seed beds for new lawns and renovating bare patches in old lawns, for window box, greenhouse and market garden soils. It will also stabilize exposed soil surfaces on baseball diamonds, clay tennis courts, football and other playing fields.

Two Juniors Who Know Their Stock

Clifford Baxter and Rhoda Simon are young people who know quite a lot about livestock. Both members of the Vaudreuil-Hudson Calf Club, they placed first in the county eliminations held prior to the Sherbrooke finals, and at Sherbrooke they placed second in a field of some 60 other competitors in the dairy cattle judging event.

During September they received tangible evidence of their ability to determine what is a good dairy cow. At the St. Lazare fair, organized by the Agricultural Society, they led a field of 10 other teams coming from the Vaudreuil-Soulanges district, winning a magnificent cup offered by Roger Maillet. The trophy was presented by Abbe Carriere, curé of Vaudreuil in the presence of a large number of special guests and a large crowd of spectators.

Combined with the fair was the annual show staged by the Montreal-Vaudreuil Holstein Club, which had 93 head of stock out. Four excellent herds of Ayrshires were also on the grounds, those of Melville Manson and Orr and Dodds of Como, Vinette and Sons and Gerard Vinette of Vaudreuil. Messrs. L. T. Chapman, Hudson Heights, and M. Yuile, of Como, showed Jerseys.

Holsteins were represented by the herds of Raymondale Farm, J. R. Hodson, Ste. Marthe, Victor Lalonde, St. Polycarpe, Stanley Hodgson, Hudson Heights, Rosaire Legault, Pointe Claire, Alpee Blanchard, Coteau, Mrs. A. G. Law, Hudson, J. D. Leger & Sons, Vaudreuil, Ed. Hodgson, Choisy, Paul-Emile Gauthier, St. Polycarpe, Earl and Carl Graham, Hudson, Donald Guindon, Hudson, Johnny and William Reid, Vaudreuil, Clifford and Kenneth Baxter, Rhoda Simon and Brian Hodgson, all of Hudson Heights.

"Royalty" At The Fair

Two "kings" were crowned during the week of the Quebec Fair. Roy Harrison of Bury received a trophy for his exhibit of maple products, and Moise-Pierre Masson received one on his exhibit of honey. These trophies were presented at a reception held in their honour, presided over by Mr. Jules Methot, director of the maple and honey division of the Department of Agriculture. Mr. J. H. Lavoie, head of the Horticulture Service, made the presentations.

Get Rid of Rats

Rats carry the germs of bubonic plague and, although Canada has not had an epidemic of this dreadful disease for almost a century, an infected rat could still cause a flareup of plague. All rats should be exterminated, for health's sake as well as for the fact that they destroy or contaminate millions of dollars worth of food and merchandise annually. Local agricultural offices will usually be able to supply information on rat extermination.



THE COLLEGE PAGE

The Macdonald Clan

Notes and News of Staff Members and Former Students

Getting The Session Started

This is the season when the Editor wishes he were twins. The copy for the October issue of the Journal must be made ready just at the time when students are lined up waiting for interviews; when timetables are being prepared and checked; when preparations are being made for registration of the incoming students, and all the thousand and one details of getting a new session underway must be attended to. It isn't only students who "burn the midnight oil." Staff members do also, on occasion.

This year's enrollment is about the same as last year, with a few more in the first years than we had last session. The new students in Agriculture look like an interesting crowd. The majority of them, of course, come from Quebec, but P.E.I., New Brunswick, Ontario and Alberta are also represented, and we have one each from India, Trinidad, Panama, Jamaica, Honduras, Dominica, Holland, Mexico, Chile and Korea.

As our editorial points out, education implies a broadening of the mind, a widening of horizons. The lessons learned in classroom and laboratory are important; so also are the lessons learned in the residence, on the sports fields and in the gymnasium. And sometimes we wonder whether our young students fully appreciate their good fortune in being able to live in close relationship with other students from other lands. How much more the lad from the farm in New Brunswick will understand about life in the East after spending a few evenings talking with the chap from Korea, or the one from India! The boy from Holland will be able to interpret life in Europe to the boy from Chile. And the boys from Quebec will have an understanding of life in Central America at the end of the session that they would probably never have obtained otherwise.

It's an interesting place, the campus of Macdonald College.

Mac Grads In New Jobs

Emmett G. Paige, B.S.A. '29, has been appointed Chief, Marketing and Merchandising, Fruit and Vegetables Division of the Federal Department of Agriculture, and took over his new duties on August 1st.

Mr. Paige has been with the Department since graduation, and has been Assistant Chief of the unit he now heads since 1947. He has over twenty years of experience in the fruit and vegetable industry in Canada, and is well known to the growers and to the trade.

Syd Williams, B.S.A. '34, M.Sc. '36, livestock specialist with the C.E.F., has been appointed Superintendent of the Experimental Farm at Nappan, N.S. Mr. Williams has been associated with sheep, beef cattle and pasture work at Ottawa since 1935, and studied agricultural research methods in Australia and New Zealand for six months in 1950.



There is nothing Prof. Maw likes better than to organize a chicken barbecue, and he has worked up such a reputation that his services are in demand for these things all over the place. His latest was here at the College in mid-September, when some 150 R.O.P. inspectors and co-operative hatchery managers came to hold a meeting at the poultry plant.

The barbecue pit, built of cement blocks, was set up on the roadway leading to the poultry building, and the tables were placed on the grass under the trees in front of the building. Various members of the staff were pressed into service to cook the chicken; serve the guests, keep the coffee coming, and so forth, and everybody apparently had a wonderful meal. Our photo was taken from one of the upper windows of the poultry building.



Champions

The farmer—like all good business men—knows the necessity for having immediately available a cash reserve. Such a reserve comes in handy—to make an opportune purchase of livestock, equipment or other farm improvement—to meet emergencies—to provide himself with things he may want for the future.

Canada Savings Bonds offer a sound way to build up reserves—a safe place to keep them!

Get the Savings Bond habit!

Canada Savings Bonds—Seventh Series—mature in 10 years and 9 months. They pay an average of 3.44% per year if held for this full term. The bonds are cashable at full face value plus interest at any time at any bank in Canada. Each bond bears ten $3\frac{1}{4}\%$ coupons—the first of these being payable on August 1st, 1954 (1 year and 9 months from date of issue). Subsequent coupons become payable August 1st yearly thereafter until maturity. If the bond is cashed before the first coupon becomes pay-

able, simple interest is paid at 2.14% per year calculated monthly. The average return per year gradually improves, the longer the bond is held, until it reaches 3.44% at maturity. The Seventh Series is available in denominations of \$50, \$100, \$500, \$1,000 and \$5,000 and the limit for holdings in any one name is \$5,000. They are non-assignable and non-transferable. They may be purchased from investment dealers, banks and other savings institutions.

They're a champion among investments—backed by all of Canada

CANADA SAVINGS BONDS

7th SERIES ON SALE STARTING OCTOBER 14th. CSF-1



THE MACDONALD LASSIE